Amendment to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (currently amended): A method of managing notifications in a web-based notifications system, said notifications system being configured to provide notifications to a user via a data communication network, said notifications containing content provided by one or more content providers, said content relating to one or more topics, said method comprising:

~~implementing~~ executing a web service on a web server, said web service responsive to notifications requests structured according to an extensible messaging framework comprising a Simple Object Access Protocol (SOAP), said web service being accessible via a hypertext transport protocol (HTTP);

receiving, via HTTP at the web service, a notifications request from a content provider, said received notifications request specifying a selected notification management function, said received notifications request being structured according to the extensible messaging framework, said received notifications request comprising a SOAP request;

extracting request information from the received notifications request, said request information including at least a content provider identifier, a user identifier to identify the user, and a plurality of topic identifiers, each said topic identifier being associated with a corresponding relative uniform resource locator (URL), wherein the relative URL is relative to the web domain of the content provider, such that the web domain of the content provider and the relative URL indicate an absolute URL in the form "//<web domain of content provider><relative URL>", wherein said corresponding relative URL corresponds to one or more topics;

executing the selected notification management function based on the extracted request information for each of the plurality of topic identifiers; and

sending a response object to the content provider via HTTP, said response object being structured according to the extensible messaging framework, said response object containing information relating to either success or failure for the executed selected notification

management function including the performed function for each of the plurality of topic identifiers.

Claim 2 (canceled).

Claim 3 (original): The method of claim 1, wherein the request includes a header and wherein extracting request information comprises extracting the content provider identifier from the header.

Claim 4 (canceled).

Claim 5 (previously presented): The method of claim 1, further comprising sending the response object to the content provider via the data communication network.

Claim 6 (previously presented): The method of claim 1, further comprising providing a command line utility configured for use by the content provider to structure the request according to the extensible messaging framework.

Claim 7 (previously presented): The method of claim 1, wherein executing the selected notification management function comprises performing a function corresponding to the topic identifier specified by the extracted request information selected from the group consisting of: creating one or more topics; deleting one or more topics; updating one or more topics; and enumerating one or more topics.

Claim 8 (canceled).

Claim 9 (currently amended): The method of claim 1 [[8]], wherein executing the selected notification management function comprises subscribing the identified user to one or more topics corresponding to the topic identifier specified by the extracted request information, said identified user to receive at least one notification via the web-based notifications system relating to the one or more topics when subscribed thereto.

Claim 10 (original): The method of claim 9, wherein subscribing the identified user comprises:

querying a user profile store for profile information corresponding to the identified user;

determining routing information for the notification based on the profile information;

creating a subscription corresponding to the topic identifier, said subscription including the topic identifier, the user identifier, and the routing path for the notification; and

creating a response object in response to said received request, said response object being structured according to the messaging framework, said response object containing information identifying the created subscription; and

sending the response object to the content provider via the data communication network.

Claim 11 (currently amended): The method of claim 1 [[8]], wherein executing the selected notification management function comprises unsubscribing the identified user to one or more topics corresponding to the topic identifier specified by the extracted request information, said identified user to no longer receive notifications via the web-based notifications system relating to the one or more topics when unsubscribed thereto.

Claim 12 (currently amended): The method of claim 1 [[8]], wherein executing the selected notification management function comprises updating one or more subscriptions based on the user identifier and the topic identifier specified by the extracted request information.

Claim 13 (previously presented): One or more computer-readable storage media having computer-executable instructions for performing the method of claim 1.

Claim 14 (currently amended): A method of managing notifications in a web-based notifications system, said notifications system being configured to provide notifications to a user via a data communication network, said notifications containing content provided by one or more content providers, said content relating to one or more topics, said method comprising:

~~implementing~~ executing a web service on a web server, said web service responsive to requests structured according to an extensible messaging framework comprising a Simple Object

Access Protocol (SOAP), said web service being accessible via a hypertext transport protocol (HTTP);

receiving, at the web service, requests from a plurality of content provider, said received requests being structured according to the extensible messaging framework, each of said received requests comprising a SOAP request;

extracting request information from each of the plurality of received requests, said request information including at least a content provider identifier, a topic identifier, a selected notification management function related to managing subscriptions to be performed by the notifications system, and a user identifier to identify the user, each content provider being associated with a plurality of subscriptions, each subscription being associated with one content provider;

querying a user profile store for profile information corresponding to each of the user identifiers of the requests, said profile information including user routing preferences to indicate which one or more user devices should receive the notifications;

querying a messaging service based on the user identifier and based on the presence of a user profile in the user profile store corresponding to each of the user identifiers of the requests for additional routing data for the delivery of notifications, said additional routing data including an opt-out status;

determining routing information for a notification based on the profile information and based on the additional routing data for each user identifier[[s]]; and

creating a subscription for the users corresponding to the topic identifiers by executing the selected notification management function based on the extracted request information, wherein the selected notification management function is related to the management of subscriptions associated with the content provider corresponding to the content provider identifier of the request and wherein the subscription for the user includes the determined routing information corresponding to the user.

Claim 15–16 (canceled).

Claim 17 (previously presented): The method of claim 14, wherein executing the selected notification management function comprises unsubscribing the user to one or more topics

corresponding to the topic identifier specified by the extracted request information, said user to no longer receive notifications via the web-based notifications system relating to the one or more topics when unsubscribed thereto.

Claim 18 (original): The method of claim 14, further comprising creating a response object in response to said received request, said response object being structured according to the messaging framework, said response object containing information relating to either success or failure of the request.

Claim 19 (original): The method of claim 18, wherein said response object contains information identifying the created subscription.

Claim 20 (original): The method of claim 18, further comprising sending the response object to the content provider via the data communication network.

Claim 21 (canceled).

Claim 22 (original): The method of claim 14, wherein the request includes a header and wherein extracting request information comprises extracting the content provider identifier from the header.

Claim 23 (previously presented): One or more computer-readable storage media having computer-executable instructions for performing the method of claim 14.

Claim 24 (currently amended): A web-based system for processing notifications, said notifications containing content provided by one or more content providers to subscribed users, said content relating to one or more topics, said system comprising:

a computing device to ~~implement~~ execute a web service on a web server, said web service responsive to notifications requests structured according to an extensible messaging framework, wherein the extensible messaging framework comprises a Simple Object Access Protocol (SOAP), said web service being accessible via a hypertext transport protocol (HTTP), said

computing device being coupled to a data communication network and configured to receive notifications requests from a plurality of content providers via the data communication network, said received notifications requests from the plurality of content providers specifying a selected notification management function related to managing subscriptions, said received notifications request being structured according to the extensible messaging framework, wherein the received notifications request comprises a SOAP request, each content provider being associated with a plurality of subscriptions, each subscription being associated with one content provider;

a computer-readable storage medium storing computer-executable instructions to be executed on the computing device to extract request information from the plurality of notifications requests, said request information including a content provider identifier, a user identifier to identify the user, and a topic identifier associated with the notifications request, said topic identifier being associated with a corresponding relative uniform resource locator (URL), wherein the relative URL is relative to the web domain of the content provider, such that the web domain of the content provider and the relative URL indicate an absolute URL in the form "//<web domain of content provider><relative URL>", wherein said corresponding relative URL corresponds to one or more topics, and to perform the selected notification management function based on the extracted request information, wherein the selected notification management function is related to the management of subscriptions associated with the content provider corresponding to the content provider identifier and the topic identifier; and

a memory associated with the computing device to store the extracted request information in connection with the selected notification management function.

Claim 25 (canceled).

Claim 26 (original): The system of claim 24, wherein the request includes a header and the content provider identifier is extracted from the header.

Claim 27 (previously presented): The system of claim 24, wherein the computer-readable storage medium further stores computer-executable instructions to be executed on the computing device to create a response object in response to said received request, said response object being

structured according to the messaging framework, said response object containing information relating to either success or failure of the request.

Claim 28 (previously presented): The system of claim 24, wherein the selected notification management function comprises one of the following: creating one or more topics; deleting one or more topics; updating one or more topics; and enumerating one or more topics.

Claim 29 (canceled).

Claim 30 (currently amended): The system of claim 24 [[29]], wherein the selected notification management function comprises subscribing the identified user to one or more topics corresponding to the topic identifier specified by the extracted request information, said identified user to receive at least one notification relating to the one or more topics when subscribed thereto, said notification including content related to said subscribed one or more topics.

Claim 31 (currently amended): The system of claim 24 [[29]], wherein the selected notification management function comprises unsubscribing the identified user to one or more topics corresponding to the topic identifier specified by the extracted request information, said identified user to no longer receive notifications relating to the one or more topics when unsubscribed thereto.

Claim 32 (currently amended): A web-based system for processing notifications, said notifications containing content provided by one or more content providers, said content relating to one or more topics, said system comprising:

a computing device to ~~implement~~ execute a web service on a web server, said web service responsive to notifications requests structured according to an extensible messaging framework, wherein the extensible messaging framework comprises a Simple Object Access Protocol (SOAP), said web service being accessible via a hypertext transport protocol (HTTP), said computing device being coupled to a data communication network and configured to receive a notifications request from a content provider via the data communication network, said received

notifications request being structured according to the extensible messaging framework, wherein the received notifications request comprises a SOAP request;

a user profile store associated with the computing device to store profile information representative of a plurality of users, said profile information including user routing preferences to indicate which one or more user devices should receive the notifications; and

a computer-readable storage medium storing computer-executable instructions to be executed on the computing device to:

extract request information from the request, said request information including a content provider identifier, a topic identifier, and a user identifier associated with the request, said user identifier identifying the user,

query the user profile store for profile information corresponding to the user identifier,

query a messaging service based on the user identifier and based on the presence of a user profile in the user profile store corresponding to the user identifier of the request for additional routing data, said additional routing data indicating an opt-out status,

determine routing information for a notification based on the profile information and the additional routing data, and

create a subscription corresponding to the topic identifier, the user identifier, and the routing path for the notification, wherein the subscribed user associated with the user identifier receives at least one notification containing content provided the content provider via the routing path, the content being related to said subscribed one or more topics associated with the topic identifier, the topic identifier being associated with a corresponding relative uniform resource locator (URL), wherein the relative URL is relative to the web domain of the content provider, such that the web domain of the content provider and the relative URL indicate an absolute URL in the form "//<web domain of content provider><relative URL>", wherein said corresponding relative URL corresponds to one or more topics.

Claim 33 (previously presented): The system of claim 32, wherein said request information extracted from the request further specifies a selected notification management function to be performed by the system, and wherein the computer-readable storage medium

further stores computer-executable instructions to be executed on the computing device to perform the selected notification management function based on the extracted request information.

Claim 34 (previously presented): The system of claim 33, wherein the selected notification management function is selected from the following group: creating one or more topics; deleting one or more topics; enumerating one or more topics; creating a subscription; deleting a subscription; updating a subscription; and enumerating subscriptions.

Claim 35 (previously presented): The system of claim 32, wherein the computer-readable storage medium further stores computer-executable instructions to be executed on the computing device to create a response object in response to said received request, said response object being structured according to the messaging framework, said response object containing information relating to either success or failure of the request, and wherein the computing device is configured to send the response object to the content provider in response to the request received therefrom.

Claim 36 (canceled).

Claim 37 (currently amended): A web service for managing notifications in a web-based notifications system, said notifications system being configured to provide notifications to a user via a data communication network, said notifications containing content provided by one or more content providers, said content relating to one or more topics, said web service comprising:

a computing device to ~~implement~~ execute the web service on a web server, said web service being accessible via a hypertext transport protocol (HTTP), said computing device being coupled to the data communication network and configured to receive notifications requests structured according to an extensible messaging framework, wherein the extensible messaging framework comprises a Simple Object Access Protocol (SOAP) and wherein the received notifications requests comprise SOAP requests, from one or more content providers via the data communication network; and

a computer-readable storage medium storing computer-executable instructions to be executed on the computing device to:

provide the extensible messaging framework to the content providers to create requests, said requests when structured according to the messaging framework each specify a selected notification management function and contain request information, said request information for each of the requests including a content provider identifier and a plurality of topic identifiers associated therewith, each said topic identifier being associated with a corresponding relative uniform resource locator (URL), wherein the relative URL is relative to the web domain of the content provider, such that the web domain of the content provider and the relative URL indicate an absolute URL in the form "//<web domain of content provider><relative URL>", wherein said corresponding relative URL corresponds to one or more topics;

extract the request information for each of the requests, said request information including a content provider identifier, a topic identifier, and a user identifier associated with the request, said user identifier identifying the user;

perform the selected notification management function based on the extracted request information; and

create a response object in response to said received request, said response object each being structured according to the messaging framework and containing information relating to either success or failure of the performed notification management functions for each of the plurality of topic identifiers.

Claim 38 (canceled).

Claim 39 (canceled).

Claim 40 (previously presented): The web service of claim 37, wherein the selected notification management function comprises is selected from the following group: creating one or more topics; deleting one or more topics; enumerating one or more topics; creating a subscription; deleting a subscription; updating a subscription; and enumerating subscriptions.